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Ringed Nathusius' Bats, *Pipistrellus nathusii*, recovered in N Italy (Mammalia Chiroptera)

Abstract — Details are given concerning 2 ♀♀ and one ♂ *Pipistrellus nathusii* ringed in Latvia (USSR) and recovered in Merano and in Venice and Grado lagoons (N Italy).

Riassunto — Ritrovamento in Italia settentrionale di tre *Pipistrellus nathusii* inanellati (Mammalia Chiroptera).

Due femmine di *Pipistrellus nathusii* inanellate nel 1987 in due località della Lettonia (URSS) sono state ritrovate a Merano e nella Laguna di Venezia un anno dopo. Un maschio della stessa specie, pure inanellato in Lettonia, è stato ritrovato in Laguna di Grado nel giugno 1990.

Key words: Chiroptera, *Pipistrellus nathusii*, ringing, USSR, Italy.

Recoveries of bats ringed abroad are very rare events in European countries and most of all in Italy, due to the scarcity of research groups involved in the study of migrating Chiroptera.

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Therefore we believe it interesting to report the recoveries of two ♀♀ and one ♂ *Nathusius*' Bats which occurred in Northern Italy during 1988 and 1990.

According to Lanza (1959), *Pipistrellus nathusii* Keyserling & Blasius, 1839, is not very frequent in Italy, especially in the Southern regions, and has not been recorded yet in Campania and Sardinia.

On 11th January 1988 O. Niederfriniger found a female *P. nathusii* with a ring No. LATVIA RIGA F. 162628, in a glass-house in Merano, Province Bozen, Trentino-Alto Adige/Südtirol region. Although lying in a container with some water, it was still alive. It was dried and fed with mealworms (10-12 larvae a day).

On 27th January the bat (Fig. 1) was set free in a loft besides the glass-house, where it hid at once between some old wooden rafters.

Thanks to the information kindly supplied by Mr Matti Masing, Institute of Forestry, Tartu, Estonia, USSR, it was ascertained that the bat was ringed by Mr Gunars Petersons on the SW coast of the Baltic Sea in Latvia. The female had been mistnetted at about 02.00 a.m., 25th August 1987, at Pape, Liepaya district, about 200 km SW from Riga in the Ornithology Station of the Institute of Biology, Academy of Sciences of Latvian SSR (56°11' N - 21°03' E). The bat was caught during the autumn migration among other bats and was set free the same night; it weighed 8.6 grams; forearm length: 35.3 mm.

The second female *P. nathusii*, with a ring No. LATVIA RIGA F. 151667, was collected on the 6th July 1988 as a dried carcass together with two other dead individuals of the same species without rings. The bat had been accidentally killed by a wooden shutter of a shooting lodge in Valle Grassabò, Venice lagoon, Veneto region. Mr S. Antoniazzi collected and kindly presented the remains of the three bats to the Museo Civico di Storia Naturale di Venezia.



Fig. 1 — Female *Pipistrellus nathusii*, Merano, January 1988 (Photo O. Niederfriniger).

Forearm length of the ringed specimen: 32.4 mm.

Mr Gunars Petersons wrote us kindly: «The bat with a ring No. LATVIA RIGA F. 151667 was ringed as a female adult on June 3rd, 1987 in the Ethnographic Open-air Museum in Riga. In this Museum in an old wooden church (Fig. 2) behind the wall-boards there dwelt a colony of *P. nathusii*, consisting of about 60 females. Of these, 36 individuals were caught and ringed».

The two ♀♀ Latvian bats have therefore covered more than 1250 km to the southwest, at least judging from the map (Fig. 3).

More recently (17th June 1990) a third ringed *P. nathusii*, a male, was



Fig. 2 — Locations of the ringing and recoveries of the two ♀♀ *Nathusius'* bats (A = Pape, Latvia; A' = Merano, Italy; B = Riga, Latvia; B' = Venice Lagoon, Italy).

found dead and dried in Grado Lagoon, locality «Isola Montaron», Gorizia province, Friuli-Venezia Giulia region, by Mr Gianfranco Paulin. The ring was inscribed «LATVIA RIGA F. 197190». The bat's forearm measured 33 mm and the skull is now preserved in the collections of the Museo Friulano di Storia Naturale, Udine (Coll. Teriol. No. 913). For the above information we are much indebted to our friends Roberto Parodi and Luca Lapini, who identified the specimen. The ♂ *P. nathusii* had been ringed in the night between 3-4 a.m., August 17th, 1989, at Pape, in Latvia (G. Petersons, in litt.).

According to Mr G. Petersons other five *Nathusius*' bats ringed in Latvia were recovered in foreign countries: France (2), Netherlands (2) and Poland (1) (see also Petersons 1990).

According to Masing (1988), *P. nathusii* is a species known for its long distance migrations. In Central and West Europe, migration distances up to 1280 kilometres have been ascertained, while in Eastern Europe Strelkov (1969) has recorded several ringed bats of this species covering migratory movements up to 1600 kilometers. We think extremely interesting the considerations given by G. Petersons (quoted by Masing, 1988), who says that «recapture rate of this species in Latvian colonies is very low». The same situation appears to take place in Estonia (about 10% as recapture rate of females). Masing concludes that in the last named country «it seems probable that breeding colonies of *P. nathusii* are quite unstable units and individuals may use different roosts and join different communities from year to year».

Considering the great importance of the recoveries of ringed bats for the Italian territory, on the occasion of the Second Italian Meeting on the census of Vertebrates (Brescia, 6-9th April 1989), it has been decided to start a new scientific campaign of bat-ringing in Italy.

In our country during the years 1950-1960 G. Dinale and G. M. Ghidini promoted a bat-ringing program based at the Museo Civico di Storia Naturale, Genova. The rings used were inscribed: «MUSEO ST. NAT. GENOVA». According to the above authors the results were satisfactory as the recoveries amounted to 15% of the number of ringings.

The new Italian rings will be supplied by Lambournes Ltd (U.K.) for the Dipartimento di Biologia Animale, Università, Piazza Botta 9, 27100 Pavia, bearing the inscription: «UNIV. PAVIA - I».

We hope to give news about the ringing campaigns in future issues of this scientific periodical.

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